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(54) Title: NMR SPECTROSCOPY METHOD

(57) Abstract

The invention relates to an *in vitro* method which comprises labelling a biological molecule with hyperpolarised xenon, and observing a magnetic resonance spectrum and/or image of the hyperpolarised xenon in the environment of the biological molecule. The spectrum/image provides information about the environment(s) at which atoms of xenon are bound to the biological molecule.